



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,947	04/27/2001	Bradford G. Ackerman	SP01-095	1336

22928 7590 03/12/2007
CORNING INCORPORATED
SP-TI-3-1
CORNING, NY 14831

EXAMINER

HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
----------	--------------

1731

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
30 DAYS	03/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

5

Office Action Summary	Application No. 09/844,947	Applicant(s) ACKERMAN ET AL.	
	Examiner John Hoffmann	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9, 13, 15, 20, 21, 23 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-9, 13, 15, 20-21, 23-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-2, 4-9, 13, 15, 20-21, 23-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Examiner could find no support for the claimed “column of solid porous preform”, or “solid porous”, “while successively translating”, “a deposition surface at a temperature below a minimum temperature at which the particles can consolidate” – either explicit or implicit. This is deemed to be a prima facie showing of failure to comply with the requirement. The burden is now on Applicant to show the requirement is complied with, or to amend the claims so that they comply.

Moreover, it is clear that at least the temperature limitation and “while successively translating” cannot be implicitly supported – because they are impossible. The terms “while” and “successively” are two mutually exclusive conditions: ‘while’ means simultaneously, and “successively” means following each other. Nor can a translating be successive with itself – at best it would have to be successive with some

Art Unit: 1731

other translating. But there is NO support for two successive translations (that Examiner can find) – Applicant cannot now claim two successive translations when the specification does not provide support therefor. As to the temperature limitation, the particles could not stick to the support or to each other if the temperature is as low as claimed. In other words, Applicant is correct in arguing that Blackwell does not meet the temperature limitation – but for the same reason, Applicant's invention does not provide support therefor.

Either something is solid or it is porous, it cannot be "solid porous" – or if it could possibly be, there would have to be support for such in the specification. The only mention of "solid" in the specification that Examiner could find is in reference to dense, non-porous glass.

There is no support for claims 20-21. Applicant does not dispute this, thus it deemed that applicant acquiesces on this point.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2, 4-9, 13, 15, 20-21, 23-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant has not disputed this rejection, thus it deemed that applicant acquiesces that the claims fail to particularly point out and distinctly claim the subject matter.

Art Unit: 1731

Claim 1: It is not understood what is meant by “column of solid porous preform” – is unclear if it means “column of solid glass or a porous preform”, or “a porous column of solid preforms” or something else. As alluded to above, the term “solid porous” is indefinite as to its meaning. And, it is unclear what is meant by “while successively” – since these two words connote mutually exclusive conditions (see above).

Claim 5: It is unclear if the “consolidation” refers to the consolidating step of claim 1, or if it is open to any consolidation.

Claim 21: There is noted that there is no antecedent basis for “the temperature at which the particles are deposited” – thus it is unclear if the claim is directed to the actual deposition temperature, or if it is directed to the temperature of the deposition surface.

Response to Arguments

Applicant's arguments filed 21 December 2006 have been fully considered but they are not persuasive.

Regarding the 112 –first paragraph rejection of “column of solid porous preform”, applicant points to specific lines in pages 2-5 of the specification. Whereas these lines do support a limitation of making a “porous column”, a ‘columnar porous preform’ or a “porous preform” and then converting it into a “solid preform” or a “solid column”, such does not support the newly created limitation of “column of solid porous preform” – as far as examiner can tell. Nor does applicant point out how these lines support this new limitation.

Applicant goes on to point out that since particles are made of solids, the result is a solid preform. This is an assertion that is prima facie unreasonable. Examiner can find no definition for "solid" that means composed of solids. By applicant's reasoning, one can consider a slurry as being a solid, because it too is comprised of solid particles. Since applicant has not defined or otherwise set forth in the as-filed application that "solid" is to mean anything else but is customary usage, the claim is interpreted using the customary definition.

As pointed out previously, the present specification only uses the term "solid" in reference to dense, non-porous glass. Since applicant does not dispute this finding by the Office.

Regarding the "while successively translating" rejection, applicant refers to page 2, page 4 and the abstract. Applicant points out that particles are deposited while the surface is rotated and translated. The relevance of this is not understood. The claim does not recite merely "while translating", rather the claim requires "while successively translating". Since applicant has failed to point out the basis for the "successively" portion of the claim, applicant has failed to show that 35 USC 112 –first paragraph is complied with.

Regarding the limitation of a "temperature below a minimum temperature at which the particles can consolidate", applicant points to page 3, lines 8-10 and pages 1-2. A review of the cited passages indicates that invention does not require capturing the soot "at consolidation temperatures". This is deemed to be insufficient because this passage only refers to the temperature of the soot – it gives no indication of the

Art Unit: 1731

temperature of the deposition surface. The limitation which is rejected refers to the temperature of the deposition surface, not the soot particles. Whereas in other situations this might appear to be splitting hairs – such is not case when one reviews the entire prosecution history. Most notably, at pages 5-6 of the Appeal Brief of 4/12/2006 applicant argues that the substantially identical process of Blackwell has temperatures at which (partial) consolidation takes place. Thus it is deemed that if Blackwell has consolidation, so do's applicant. The plain meaning of "consolidate" is "to join together into one whole"; Since applicant clearly consolidates the particles, there must be something at a temperature which is not below the minimum temperature which permits consolidation.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

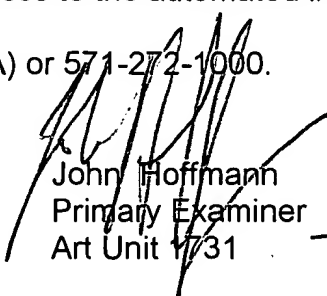
Art Unit: 1731

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


John Hoffmann
Primary Examiner
Art Unit 1731

3-1-07

jmh